

ADDITIONAL NOTES ON THE GENUS PRIVA. V .

Harold N. Moldenke

PRIVA Adans.

Additional bibliography: Moldenke, Phytologia 5: 22, 26, 31, 61--73, 75--79, 95, 98, 105, 107--111, & 511 (1957), 6: 232, 234, 235, 239, & 242 (1958), and 6: 511. 1959; Srinivasan & Agarwal, Bull. Bot. Surv. India 5: 68. 1963; S. V. Ramaswamy, Bull. Bot. Surv. India 6: 17. 1964; Moldenke, Phytologia 14: 336--357. 1967.

PRIVA ADHAERENS (Forsk.) Chiov.

Additional bibliography: Moldenke, Phytologia 14: 338--339 & 346. 1967.

PRIVA ASPERA H.B.K.

Ton found this species growing on a slope with Quercus, Pinus, and Liquidambar.

Additional citations: MEXICO: Chiapas: A. S. Ton 372 (Ws).

PRIVA CORDIFOLIA (L. f.) Druce

Additional bibliography: Srinivasan & Agarwal, Bull. Bot. Surv. India 5: 68. 1963; S. V. Ramaswamy, Bull. Bot. Surv. India 6: 17. 1964; Moldenke, Phytologia 14: 338 & 345--348. 1967.

Ramaswamy (1964) states that this plant grows in hedges along roadsides in India.

PRIVA CURTISIAE Kobuski

Additional bibliography: Moldenke, Phytologia 14: 343, 347, & 348. 1967.

PRIVA LAPPULACEA (L.) Pers.

Additional bibliography: Moldenke, Phytologia 14: 345 & 350--389. 1967.

Additional citations: MEXICO: Oaxaca: Martínez-Calderón 744 (Mi). COLOMBIA: Magdalena: H. H. Smith 1465 (Mi). BRAZIL: Matogrosso: F. C. Hoehne Com. Rondon 5698 (W--1199577). Pará: Dahlgren & Sella 134 (F--603315, W--1471345); D. A. Lima 53-1294 (Be--80833). BOLIVIA: El Beni: H. H. Rusby 1784 (W--43521, Ws). La Paz: M. Bang 1375 (E--118800, W--43520); H. H. Rusby 698 (D--645881, W--1284155). GHANA: J. B. Hall 2517 (S). INDONESIA: GREATER SUNDA ISLANDS: Java: Den Berger 792 (Ca--236030). LOCALITY OF COLLECTION UNDESIGNATED: Herb. A. Gray 157 (E--118767). MOUNTED ILLUSTRATIONS: Kobuski drawing 10 (E--925406), 19 (E--925405).

PRIVA MEXICANA (L.) Pers.

Additional & emended synonymy: Verbena mexicana trachelii folio, fructu aparines Dill., Hort. Eltham. 407--408, pl. 302, fig. 389.

1732. Verbena mexican. J. A. Murr. in L., Syst. Veg., ed. 13, 62. 1774. Verbena diandra, spic. laxis, calyc. fructus reflexis rotundato-didymis hispidis J. A. Murr. in L., Syst. Veg., ed. 13, 62. 1774. Verbena diandra, spicis laxis, calycib. fructus reflexis rotundato-didymis hispidis L. apud H. E. Richter, Cod. Bot. Linn. 35. 1835. Verbena mexicana, trachelii fol., fructu aparines Dill. apud H. E. Richter, Cod. Bot. Linn. 35, in syn. 1835. Verbena mexicana, trachelii fol. etc. Dill. apud Peterm., Cod. Bot. Linn. Ind. Alph. 196, in syn. 1840. Verbena mexicana Pers. ex Steud., Nom. Bot., ed. 2, 2: 750, in syn. 1841. Blairia mexicana Gaertn. apud Bocq., Adansonia 3: 239. 1863. Priva mexicana Pers. apud Benth. in Benth. & Hook. f., Gen. Pl. 2 (2): 1145. 1876 [not P. mexicana Sieber, 1841]. Drepania mexicana Pers. ex Moldenke, Phytologia 5: 108, in text. 1954. Verbena uncinata Waterfall ex Moldenke, Résumé Suppl. 3: 41, in syn. 1962. Priva spicata A. L. Juss. ex Langman, Select. Guide Lit. Flow. Pl. Mex. 1010, in text. 1964. Priva mexicana (L.) D. Don, in herb.

Additional & emended bibliography: Dill., Hort. Eltham. 407—408, pl. 302, fig. 389. 1732; L., Syst. Nat., ed. 10, 852. 1759; J. A. Murr. in L., Syst. Veg., ed. 13, 62. 1774; Dill., Hort. Eltham. Add. Denom. Linn. pl. 302. 1774; Christm. & Panzer, Vollst. Pflanzensyst. Houttuyn 5: 122. 1779; A. L. Juss., Ann. Mus. Nat. Hist. Paris 7: 69. 1806; M. Mirbel, Ann. Mus. Nat. Hist. Nat. Paris 15: 260, pl. 14 (2), fig. 2. 1810; Dum. Cours., Bot. Cult., ed. 2, 2: 622—623. 1811; J. Sm. in Rees, Cycl. 36: no. 1. 1817; H. E. Richter, Cod. Bot. Linn. 35. 1835; Peterm., Cod. Bot. Linn. Ind. Alph. 196. 1840; Steud., Nom. Bot., ed. 2, 2: 750. 1841; Walp., Repert. 4: 34. 1845; Bocq., Adansonia 2: 94—96 (1863) and 3: 239. 1863; Bocq., Rev. Verbenac. 94—96 & 239. 1863; Jacks. in Hook. f. & Jacks., Ind. Kew. 2: 628. 1894; M. Kunz, Anatom. Untersuch. Verb. 55. 1911; Loes., Verh. Bot. Ver. Brand. 53: 80 [Abhandl. 245]. 1912; Britton & P. Wils., Scient. Surv. Porto Rico 6: 145. 1925; Stapf, Ind. Lond. 6: 430. 1931; J. Rzedowski, Anal. Esc. Nac. Cienc. Biol. 8: 105. 1954; J. Rzedowski, Ciencia 15: 146, 147, & 150. 1955; Hocking, Dict. Terms Pharmacog. 128. 1955; J. Rzedowski, Anal. Inst. Biol. Mex. 27: 198. 1956; J. & G. C. Rzedowski, Act. Cient. Potos. 1: 50. 1957; Moldenke, Résumé 30, 38, 42, 55, 62, 222, 237, 279, 340, 362, 370, 394, & 468. 1959; Langman, Select. Guide Lit. Flow. Pl. Mex. 402 & 1010. 1964; Moldenke, Résumé Suppl. 12: 12. 1965; Moldenke, Phytologia 14: 341. 1967.

Illustrations: Dill., Hort. Eltham. pl. 302, fig. 389. 1732; Dill., Hort. Eltham. Add. Denom. Linn. pl. 302. 1774; M. Mirbel, Ann. Mus. Nat. Hist. Nat. Paris 15: pl. 14 (2), fig. 2. 1810.

Recent collectors describe this plant as an upright perennial herb or bushy shrub, 0.1—1 m. tall, "sticky", with several virgate stems from the base and "panicles of long spikes", the fruit easily detached, adhesive. They have found it growing in open matorral, open scrubby, and wet spots, in Myrtillocacatus associ-

ation, and in steep south-facing Quercus woodlands with occasional Pinus, Arbutus, Ceanothus, Mimosa, Erythrina, etc., along the open border of oak forests, on oak flats, tufaceous monadnocks, rocky basalt, limestone cliffs and slopes, wooded slopes, steep slopes with Quercus, dry grazed slopes with Agave, Opuntia, Acacia, and Solanum polyadenium, and on brush-covered hills among shrubs and small trees of Acacia, Mimosa, and Opuntia, at altitudes of 50 to 2460 meters, flowering from May to October, and fruiting from June to December. Waterfall encountered it near a mountaintop with a few scattered longleaf pines. It has been recorded from the island of St. Thomas, in the West Indies, by Krebs, but apparently in error, according to Britton & Wilson (1925).

The type of Verbena uncinata is Waterfall 12536, collected on grassy flats in Durango, Mexico.

A common name recorded for this plant is "Mexican vervain". The corollas are described as "lilac" on J. A. Steyermark 46287; "pink" on Lundell & Lundell 12351; "purple" on J. Rzedowski 4942; "white" on Breedlove 11410 & 12272 and S. S. White 1566; "white and pink" on Stanford, Lauber, & Taylor 2063; "pinkish-white, mostly white" on Stanford, Lauber, & Taylor 2674; and "purplish-red, the upper lip lined, the tube pale" on R. McVaugh 16665. R. M. King 1967 exhibits leaves and fruiting-calyxes that greatly resemble those of P. lappulacea (L.) Pers., but the cocci are smooth. Possibly it represents a hybrid.

Additional & emended citations: MEXICO: Aguascalientes: R. Mc Vaugh 16665 (Mi). Chihuahua: Correll & Gentry 22770 (Ld); Gentry, Correll, & Arguelles 17962 (Ld); Pringle 1354 (W-57690, W-481216). Coahuila: Edw. Palmer 281 (Ca-139745, E-118805, W-336277); Purpus 1096 (Ca-139742). Durango: E. W. Nelson 4709 (W-332763); Edw. Palmer 578 (Ca-520602, E-118777, E-118778, W-304255); Reko 5304 (F-600913); Shreve 9138 (Ca-731837); Waterfall 12536 (Gg, St), 15376 (Gg). Federal District: Barkley & Rowell 7469 (Au-170035, Ip, Mi); G. L. Fisher s.n. [July 18, 1924] (Vi); Matuda 18875 (W-2397279); Miranda & Barkley 16M958 (N). Guanajuato: Purpus s.n. [Silao] (Ca-520601). Hidalgo: V. H. Chase 7202 (Ur), 7329 (Ur); Pringle 9287 (E-118776, W-396407); Rose & Painter 6642 (W-450198). Jalisco: R. McVaugh 20652 (Mi). México: Arsène 8508 (E-839806, F-484993), 8808 (W-1003437); G. L. Fisher 316 (E-914793, F-555008, W-1207407); Hernandez Corzo & Guzmán s.n. [9.VIII.1963] (Ip); Lundell & Lundell 12351 (Rf, Rf); Matuda 26721 (Z); Orcutt 3628 (E-118910, F-281921, W-567395); Paray 2417 (Ip). Michoacán: Arsène s.n. [Loma Sta. María, Aout 28, 1910] (E-844848, W-1003568), s.n. [Jaripeo, July 13, 1911] (E-844841, W-1003569); Iltis, Koeppen, & Iltis 443 (S). Nuevo León: Abbon 242 [Arsène 6178] (W-1003563); Mueller & Mueller 308 (F-683141), 986 (G); S. S. White 1566 (Mi). Oaxaca: Breedlove

12272 (Rf); R. M. King 1967 (N); E. W. Nelson 1822 (W-566114). Puebla: Arsène 96 (W-1003559), 1195 (W-1003558), 1340 (W-1003567), 7054 (W-1003560), 10207 (W-1003311); Nicolas & Arsène 5280 (E-844853, W-1003565); Purpus 2569 (Ca-139741), 3524 (Ca-139740); Ugent & Flores C. 2541 (Ws). Querétaro: Waterfall 14129 (Gg). San Luis Potosí: G. L. Fisher 3343 (W-1589408); F. W. Gould 10810 (Mi); Parry & Palmer 713, in part (E-118783, E-118784, W-43503); Purpus 5518 (Ca-157225, E-118804, W-464002), 5519 (Ca-157215); J. Rzedowski 3800 (Ip), 4942 (Ip), 6280 (Ip). Sonora: H. S. Gentry 1383 (F-766070); S. S. White 2635 (Mi). Tamaulipas: Stanford, Lauber, & Taylor 2063 (Du-453603, Hi-200919, W-2216858), 2674 (Du-453592, W-2216905); Stanford, Rutherford, & Northcraft 772 (Ca-713798). Vera Cruz: Bourgeau 3118, in part (F-264560). State undetermined: Foreman 24 (Ok); Herb. Bernhardi s.n. (E-114056). GUATEMALA: Baja Verapaz: Türckheim II.2331 (W-1323154). El Petén: J. A. Steyermark 46287 (N). Sacatepéquez: Breedlove 11410 (Ac). Department undetermined: Tonduz 787 [Brefias] (W-1084758). CULTIVATED: Germany: Hort. Bot. Göttingen s.n. [1795] (E-118773, E-118774); Herb. F. J. Young s.n. (Ws). MOUNTED ILLUSTRATIONS: Kobuski drawing 15 (E-925406), 24 (E-925405).

PRIVA MEYERI Jaub. & Spach

Additional bibliography: Bocq., Adansonia 3: [Rev. Verbenac.] 212. 1863; Jacks. in Hook. f. & Jacks., Ind. Kew. 2: 628. 1894; Moldenke, Phytologia 5: 98 & 110-111. 1954; Moldenke in Humbert, Fl. Madag. 174: 29. 1956; Moldenke, Résumé 143, 145, 149, 151, 154, 340, & 468. 1959; Moldenke, Phytologia 14: 347. 1967.

Rodin describes this as a herbaceous plant, 3 feet tall, the inflated calyx covered with viscid glandular hairs, growing in the strand association with trees and shrubs on the inner beach. Galpin found it on a river bank. Peter found it growing at altitudes of 520 to 1500 meters. The corollas are described as "light-blue" on Rodin 4158 and as "white" on Peter 15509. Wart-like projections are found on the cocci of Barbosa 1151, Junod 277, and Torre 245. The last-mentioned collection matches well the C. E. Moss 18288 specimen in the herbarium of the British Museum. The species has been collected in anthesis from January to April, as well as in August and November, and in fruit in March, April, and August.

The L. E. Codd 5249 and E. Sousa 5, distributed as this species, are actually P. cordifolia var. abyssinica (Jaub. & Spach) Moldenke. Simão 154 is a mixture with something non-verbenaceous. The Leendertz s.n. [I.09] cited in Phytologia 5: 111 (1954) as deposited in the Britton Herbarium is now in the herbarium of the Conservatoire et Jardin Botaniques at Geneva, Switzerland.

Additional & emended citations: TANGANYIKA: A. Peter 12501 [O. III.156] (B), 15509 [O.IV.14] (B), 51780 [O.I.55] (B). PORTUGUESE EAST AFRICA: Lourenço Marques: Junod 277 (Ul); Rodin 4158 (W-

2063092); Torre 2425 (U1). Manica e Safala: Barbosa 1151 (U1); Simão 154, in part (U1). SOUTH AFRICA: Cape of Good Hope: Bolus 306 (F-439662); Drège a (E-118803—cotype); MacOwan s.n. [Boschberg] (F-46279). Natal: E. E. Galpin 14782 (N).

PRIVA MEYERI var. **MADAGASCARIENSIS** Moldenke

Additional bibliography: Moldenke, Phytologia 5: 111. 1954; Moldenke in Humbert, Fl. Madag., 174: 29—30. 1956; Moldenke, Résumé 156 & 468. 1959.

PRIVA PEDICELLATA Moldenke

Additional bibliography: Hill & Salisb., Ind. Kew. Suppl. 10: 184. 1947; Moldenke, Phytologia 5: 111. 1954; Moldenke, Résumé 166 & 468. 1959.

PRIVA PERUVIANA Moldenke

Additional bibliography: Hill & Salisb., Ind. Kew. Suppl. 10: 184. 1947; Moldenke, Phytologia 5: 111. 1954; Moldenke, Résumé 84 & 468. 1959.

Additional citations: PERU: Amazonas: A. Mathews 3158 (G—
isotype).

PRIVA PORTORICENSIS Urb.

Bibliography: Urb., Symb. Ant. 4: 534. 1903; Prain, Ind. Kew. Suppl. 5: 207. 1921; Britton & P. Wils., Scient. Surv. Porto Rico 6: 144 & 145. 1925; Moldenke in Fedde, Repert. Spec. Nov. 41: 19—21. 1936; Moldenke, Résumé 58, 419, & 468. 1959.

PRIVA SOCOTRANA Moldenke

Additional bibliography: Hill & Salisb., Ind. Kew. Suppl. 10: 184. 1947; Moldenke, Phytologia 5: 111. 1954; Moldenke, Résumé 158 & 468. 1959.

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NOTES ON NEW AND NOTEWORTHY PLANTS. XLVII

Harold N. Moldenke

CALLICARPA BICOLOR var. **BERMEJOSI** Moldenke, var. nov.

Haec varietas a forma typica speciei recedit laminis foliorum oblongo-lanceolatis vel oblongis 13—18 cm. longis 3—5 cm. lat. ad basin apicemque longe-acuminatis, margine subintegris vel obscure sinuato-crenatis.

This variety differs from the typical form of the species in having its leaf-blades oblong-lanceolate or oblong, 13—18 cm. long, 3—5 cm. wide, conspicuously long-acuminate at both ends, and subentire or obscurely sinuate-crenate along the margins.

The type of the variety was collected by J. Bermejos — in